WHAT IS CLAIMED IS:

1. A method of producing a coated paper or paperboard, but excluding photographic papers, comprising the steps of:
(a) forming a free flowing curtain comprising at least one layer, whereby a composition forming at least one layer of the free flowing curtain has, at a temperature of 25°C and at a shear rate of 500,000 s^{-1}, a high shear viscosity of at least about 50 mPa·s, and
(b) contacting the curtain with a continuous web substrate of basepaper or paperboard.

2. The method of Claim 1, wherein at least one layer of the free flowing curtain of step (a) has a high shear viscosity of at least about 75 mPa·s.

3. A method of producing a coated paper or paperboard, but excluding photographic papers, comprising the steps of:
(a) forming a free flowing curtain comprising at least one layer, whereby a composition forming at least one layer of the free flowing curtain comprises at least one pigment, the morphology and structure of which is destroyed at a shear rate of less than 500,000 s^{-1}, and
(b) contacting the curtain with a continuous web substrate of basepaper or paperboard.

4. A method of producing a coated paper or paperboard, but excluding photographic papers, comprising the steps of:
(a) forming a free flowing curtain comprising at least one layer, whereby a composition forming at least one layer of the free flowing curtain has a Shear-Thickening Index, defined as the ratio of the viscosity at 30,000 s^{-1} to the viscosity at 3,000 s^{-1} at 25°C, of at least about 1.2, and
(b) contacting the curtain with a continuous web substrate of basepaper and paperboard.

5. The method of Claim 1, 3 or 4, wherein the free flowing curtain of step (a) is a multilayer free flowing curtain.

6. The method of Claim 1, 3 or 4, wherein the free flowing curtain of step (a) comprises a top layer ensuring printability.

7. The method of Claim 1, wherein the free flowing curtain of step (a) comprises at least 3 layers.

8. The method of Claim 1, 3 or 4, wherein at least one layer of the free flowing curtain of step (a) comprises at least one pigment.

9. The method of Claim 8, wherein the pigment is selected from the group consisting of clay, kaolin, calcined clay, co-structured pigments, talc, calcium carbonate, titanium dioxide, satin white, synthetic polymer pigment, zinc oxide, barium sulfate, gypsum, silica, alumina trihydrate, mica, and diatomaceous earth.

10. The method of Claim 1, 3 or 4, wherein at least one layer of the free flowing curtain of step (a) comprises at least one pigment having an aspect ratio of at least about 1.5:1.

11. The method of Claim 1, 3 or 4, wherein at least one layer of the free flowing curtain of step (a) comprises a binder.

12. The method of Claim 11, wherein the binder is selected from the group consisting of styrene-butadiene latex, styrene-acrylate latex, styrene-butadiene-acrylonitrile latex, styrene-acrylate-acrylonitrile latex, styrene-butadiene-acrylate-acrylonitrile latex, styrene-maleic anhydride latex, styrene-acrylate-maleic anydride latex, polysaccharides, proteins, polyvinyl pyrrolidone, polyvinyl alcohol, polyvinyl acetate, cellulose derivatives and mixtures thereof.

13. The method of Claim 1, 3 or 4, wherein at least one layer of the free flowing curtain of step (a) has a solids content of at least about 30 wt.%.

14. The method of Claim 1, 3 or 4, wherein the free flowing curtain of step (a) has a solids content of at least about 40 wt.%.

15. The method of Claim 1, 3 or 4, wherein at least one layer of the free flowing curtain of step (a) comprises at least one optical brightening agent.

16. The method of Claim 1, 3 or 4, wherein the free flowing curtain of step (a) comprises at least 4 layers.

17. The method of Claim 1, 3 or 4, wherein at least one of the layers of the free flowing curtain of step (a) has a dry coatweight of less than about 10 g/m^2.

18. The method of Claim 1, 3 or 4, wherein the continuous web substrate of step (b) is neither precoated nor precalendered.

19. The method of Claim 1, 3 or 4, wherein the continuous web substrate of step (b) has a web velocity of at least about 300 m/min.

20. The method of Claim 1, 3 or 4, wherein the continuous web substrate of step (b) has a grammage of from about 20 to about 350 g/m^2.

21. A coated paper or paperboard obtainable by the method of Claim 1, 3 or 4.

22. The method of Claim 1, 3 or 4, wherein the free flowing curtain of step (a) comprises at least 5 layers.

23. The method of Claim 1, 3 or 4, wherein the free flowing curtain of step (a) comprises at least 6 layers.

24. The method of Claim 1, 3 or 4, wherein the continuous web substrate of step (b) has a web velocity of at least about 400 m/min.

25. The method of Claim 1, 3 or 4, wherein the continuous web substrate of step (b) has a web velocity of at least about 500 m/min.

26. The method of Claim 1, characterized in that at least one layer of the free flowing curtain of step (a) comprises at least one surfactant.

27. The method of Claim 1, wherein the continuous web substrate has a velocity of at least about 800 m/min.

28. The method of Claim 1, wherein the continuous web substrate has a velocity of at least about 1000 m/min.

29. The method of Claim 1, wherein the curtain is formed with a slot die.

30. The method of Claim 1, wherein the curtain is formed with a slide die.

31. The method of Claim 1, 3 or 4, wherein at least one layer of the curtain comprises polyethylene oxide.

32. The method of Claim 1, 3 or 4, wherein the curtain comprises polyethylene oxide in the interface layer.

33. The method of Claim 8, wherein the pigment comprises synthetic magadiite.

34. A method of producing a coated paper or paperboard, but excluding photographic papers, comprising the steps of:
(a) forming a free flowing curtain comprising at least one layer, whereby a composition forming at least one layer of the free flowing curtain has a Shear-Blocking Behavior, and
(b) contacting the curtain with a continuous web substrate of basepaper and paperboard.

35. A method of producing a coated paper or paperboard, but excluding photographic papers, comprising the steps of:
(a) forming a free flowing curtain comprising at least one layer, whereby a composition forming at least one layer of the free flowing curtain exhibits a difference between the Immobilization Solids Content and the Coating Application Solids of less than about 17, and
(b) contacting the curtain with a continuous web substrate of basepaper and paperboard.

36. A method of producing a coated paper or paperboard, but excluding photographic papers, comprising the steps of:

(a) forming a free flowing curtain comprising at least one layer, whereby the pigment of a composition forming at least one layer of the free flowing curtain has a particle size of at least about 2 microns, and

(b) contacting the curtain with a continuous web substrate of basepaper and paperboard.

37. The method of Claim 34, wherein the pigment in the coating composition contains at least about 0.5 wt.% of particles that are greater than about 10 microns in diameter.